

SELECTIVE AREA GROWTH OF CARBON NANOTUBES BY METAL IMPRINT METHOD

ABSTRACT OF THE INVENTION

Manufacturing methods of using a metal imprint technique for growing carbon nanotubes on selective areas and the structures formed thereof are provided. One of the manufacturing methods includes steps of forming a first substrate with tapered structures applied with a metal catalyst, imprinting a second substrate on the first substrate for being a growth substrate, and growing carbon nanotubes on the growth substrate. The other manufacturing method includes steps of forming a first substrate with tapered structures, imprinting the first substrate on a second substrate applied with a metal catalyst for forming a second growth substrate, and growing carbon nanotubes on the second grown substrate. And, the formed structures of the present invention include a substrate, plural carbon nanotubes, and plural imprinted vestiges.